NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

CLEARING AND SNAGGING

(ft)

CODE 326

DEFINITION

Removing snags, drifts, or other obstructions from a channel.

PURPOSE

- To increase the flow capacity of a channel by improving its flow characteristics.
- To prevent bank erosion by eddies.
- To reduce the forming of sediment bars.
- To minimize blockages by debris and ice.

Special attention shall be given to restoring, maintaining or improving landscape resources and habitat for fish and wildlife, where applicable.

CONDITIONS WHERE PRACTICE APPLIES

Any channel or floodway where the removal or selective snagging of trees, brush, and other obstructions is needed to accomplish one or more of the listed purposes. If clearing and snagging are likely to result in channel erosion, impairment to the landscape resource quality, or impairment to habitat for fish and wildlife, either the clearing and snagging shall not be done or practices to minimize such damages shall be applied concurrently with the clearing and snagging.

CRITERIA

The capacity of the channel, both before and after improvement, shall be determined by use of Manning's Formula, using applicable values of the retardance factor "n," for both conditions. The value of "n" used to determine channel capacity after improvement shall reflect the degree of maintenance expected in future years.

The channel shall be classified according to Rosgen's and/or Shumm's Channel Evolution Model (CEM) stream classification process. The clearing and snagging shall be planned so that the channel will move toward a stable form.

The area to be cleared and snagged shall include the perimeter of the channel, the flow area of the floodway, or both. Adjacent trees or other objects that may fall into the channel shall also be included. Clearing and snagging may be specified for other areas, including berms, for use as temporary disposal areas or travelways, or for planned conservation uses.

Channel stability shall not be impaired by clearing and snagging. The criteria for determining channel stability in open channels (582) shall be complied with. The effect of removing obstructions on downstream reaches shall be considered.

The use of explosives in all clearing and snagging operations shall be in strict compliance with applicable state and federal (OSHA) statutes and regulations.

The design and construction shall comply with Sections 401 and 404 of the Clean Water Act administered by the Corps of Engineers and Nebraska Department of Environmental Quality and with regulations for air quality issued by the Nebraska Department of Environmental Quality.

CONSIDERATIONS

Where possible, Consider selective snagging, performed primarily with hand-operated equipment, water-based equipment, or small

equipment used in a manner that minimizes soil, water, and other resource disturbances.

Measures and construction methods that enhance fish and wildlife values should be incorporated as needed and practical. Special attention should be given to visual resources, protecting and maintaining key shade, food, and den trees and to stabilization of disturbed areas.

PLANS AND SPECIFICATIONS

Plans and specifications for clearing and snagging shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose.

Removal of any trees and brush will be done in such a manner as to avoid damage to other trees and property. Disposal of trees, brush and other material will be done in such a way as to have the least detrimental effect on the environment and in keeping with Nebraska Laws.

Construction operations shall be carried out in such manner that erosion and air and water pollution will be minimized.